# UNITED STATES OF AMERICA BEFORE THE FEDERAL COMMUNICATIONS COMMISSION

In the Matter of	)	
Amendment of Parts 1, 2, 15, 74, 78, 87, 90 and 97	)	ET Docket No. 12-338
Of the Commission's Rules Regarding Implementation	)	
Of the Final Acts of the World Radiocommunication	)	
Conference (Geneva, 2007) (WRC-07), Other	)	
Allocation Issues, and Related Rule Updates	)	

#### COMMENTS OF AMERICAN TRANSMISSION COMPANY LLC

Pursuant to Sections 1.415 and 1.419 of the Federal Communication Commission's rules, 47 C.F.R. §§ 1.415 and 1.419 (2012), and Section VI of the November 15, 2012 Notice of Proposed Rulemaking and Order issued in the above-docketed proceeding, American Transmission Company LLC, by its corporate manager, ATC Management Inc. (collectively, "American Transmission"), hereby respectfully submits the following Comments in the above-docketed proceeding. In support, American Transmission provides as follows:

#### I. BACKGROUND

On November 19, 2012, the Commission issued the NOPR, in which it proposed to amend various parts of the Commission's rules to implement allocation decisions from the World Radiocommunication Conference (Geneva, 2007) (WRC-07) concerning portions of the radio frequency spectrum between 108 MHz and 20.2 GHz, and to update certain rules in this frequency range.<sup>2</sup> As relevant here, the Commission specifically proposed to "[a]llocate the 135.7-137.8 kHz band to the amateur radio service on a secondary basis, subject to the protection

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In re Amendment of Parts 1, 2, 15, 74, 78, 87, 90, and 97 of the Commission's Rules Regarding Implementation of the Final Acts of the World Radiocommunication Conference (Geneva, 20076) (WRC-07), Other Allocation Issues, and Related Rule Updates, Notice of Proposed Rulemaking and Order, ET Docket No. 12-338, issued Nov. 19, 2012 ("NOPR").

NOPR, ¶ 1 (citation omitted).

of power line carrier [PLC] operations."<sup>3</sup> The Commission stated further that it had previously declined to authorize this frequency reallocation in 2002 "after finding the potential for interference between amateur operations proposed at that time and the incumbent PLCs, and noting the importance of the PLC operations in helping maintain critical electric infrastructure."<sup>4</sup> However, given that the relevant frequency band was subsequently allocated to the amateur service on a secondary basis in all ITU Regions, the Commission is re-examining in this NOPR the potential for shared amateur service-PLC use of this band, subject to certain restrictions.<sup>5</sup> The Commission requested the interested members of the public comment on whether this frequency band should be allocated to the amateur service on a secondary basis, subject to certain restrictions; and also requested that commenters address any recent developments that would have a bearing on the Commission's previous decision in the 2002 Order.<sup>6</sup>

American Transmission Company LLC, and its corporate manager, ATC Management Inc., are a limited liability company and corporation, respectively, organized and existing under the laws of the State of Wisconsin with a principal place of business located at W234 N2000, Ridgeview Parkway Court, Waukesha, Wisconsin, 53188. American Transmission owns and operates more than 9,400 miles of transmission lines and more than 510 substations located in Wisconsin, Michigan, and portions of Illinois and Minnesota. American Transmission's facilities are interconnected with more than 60 distribution systems and more than 80 generating facilities. American Transmission is transmission-owning member of the Midwest Independent

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See id.,  $\P$  3.

See id., ¶ 15, 16, citing to Amendment of Parts 2 and 97 of the Commission's Rules to Create a Low Frequency Allocation for the Amateur Radio Service, ET Docket No. 02-98, Report and Order, 18 FCC Rcd 8954, 8963 ¶ 25 (2002) ("2002 Order").

<sup>&</sup>lt;sup>5</sup> See id., ¶ 16.

See id.

Transmission System Operator, Inc., ("Midwest ISO"), and transmission service is provided over American Transmission's transmission facilities pursuant to the Midwest ISO Open Access Transmission, Energy and Operating Reserves Market Tariff.<sup>7</sup> The Midwest ISO exercises operational control of American Transmission's transmission facilities, but American Transmission provides the day-to-day operation and control of its transmission facilities.

As relevant here, American Transmission owns and operates numerous transmission facilities that are supported by PLC. These facilities are listed in the Utilities Telecom Council ("UTC") national database which is authorized by the FCC for this informational purpose. The unlicensed use of power line carrier (PLC) systems by electric utilities was first authorized by the Commission in 1938, classified as Restricted Radiation Devices in 1949, and referenced in a footnote in Rule 15 of 1978. Electric utilities such as American Transmission have thus been relying on PLC communications for decades. American Transmission will be directly affected by the outcome of this proceeding, and American Transmission's interest in the proceeding cannot be adequately represented by any other party.

American Transmission opposes the Commission's proposal, as set forth in the NOPR, to reallocate the frequencies from 135.7 to 137.8 kHz to Amateur Radio users on a secondary basis, subject to certain conditions. The negligible benefit to the public of such frequency reallocation is substantially outweighed by the costs to electric utilities such as ATC. Amateur Radio users are recreational users that have access to numerous other frequencies with which to pursue their hobby. In comparison, electric utilities such as ATC utilize the relevant frequencies to provide communications that are integral to maintaining the reliability of the nation's electrical power system. The reallocation of relevant frequencies proposed by the Commission in the NOPR would require electric utilities such as American Transmission to abandon a large swath of

Midwest ISO FERC Electric Tariff, Fifth Rev. Vol. No. 1.

already-crowded frequency for which there is no practical, cost- or time-effective substitute. Thus, if approved, the frequency reallocation proposed by the Commission in the NOPR would directly and negatively impact the reliability of the electrical transmission system of American Transmission, and, by extension, the interconnected electrical grid of the United States.

American Transmission's electric transmission system, with thousands of miles of transmission line spanning multiple states, needs fast, reliable communication between substations to quickly isolate short circuits and to ensure continuous, robust electric grid service. American Transmission, like most electric transmission owners, uses a high frequency PLC signal coupled directly to the power lines to serve the majority of these communication needs. Reallocating the 135.7 to 137.8 kHz frequency band for use by Amateur Radio would require American Transmission to abandon a larger frequency band of 132-142 kHz for its PLC system so as to avoid interference from Amateur Radio users. In larger (and thus more critical) substations, the PLC frequency spectrum is already crowded, and it is impossible for American Transmission to easily replace the abandoned frequency range.

In the short-term, any attempt to replace the abandoned frequency would require American Transmission to install, at considerable expense, new high voltage termination equipment to allow the use of frequencies above the typical 200 kHz limit currently utilized by American Transmission. In addition to being very expensive, the PLC signal from these higher-frequency facilities would be less reliable, because signal attenuation on the power line increases commensurate with frequency. Over the long term, it is conceivable that American Transmission could install comparable fiber optic communications on an incremental basis during construction of new lines. However, retrofitting fiber optics on an existing transmission line may be prohibitively expensive, as it may require the replacement of transmission towers.

Leased telephone lines that meet the utility requirements are effectively unavailable as telephone companies have abandoned special purpose land lines, and a cellular link is neither reliable nor fast enough. Thus, there are no good, practical solutions without a large capital expenditure over numerous years for electric utilities such as American Transmission to avoid interference from Amateur Radio in the 135.7 to 137.8 kHz frequency band.

The Commission specifically requested in the NOPR that interested members of the public comment on "any recent developments that would prompt of re-evaluation of the Commission's prior decision [in the 2002 Order]." As noted above, the Commission declined in the 2002 Order to allocate the 135.7 to 135.9 kHz frequency band to Amateur Radio because it determined then that any such reallocation would have a negative impact on reliability of critical electric infrastructure. In response to the Commission's request, American Transmission respectfully informs the Commission that concern over reliability of the nation's critical electric infrastructure has only increased over the ten years since the issuance of the 2002 Order. For example, the United States Congress has since passed the Energy Policy Act of 2005, which, as relevant here, mandated the creation of a national Electric Reliability Organization ("ERO")<sup>9</sup> tasked with creating and enforcing a comprehensive scheme of mandatory electric reliability standards applicable to every entity that could directly affect the nation's Bulk Electric System, subject to the oversight of the Federal Energy Regulatory Commission ("FERC"). 10 Continuously increasing electric reliability has become a top industry and national priority in the intervening years.

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NOPR at P  $\P$  16.

The North American Electric Reliability Corporation was ultimately selected to be ERO. *See North American Electric Reliability Corp.*, 116 FERC ¶ 61,062 (2006).

<sup>16</sup> U.S.C. 824*o*, et. seq. (2006).

### II. COMMUNICATIONS AND CORRESPONDENCE

All communications and correspondence regarding this matter should be addressed to the following persons:

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## III. CONCLUSION

For the foregoing reasons, American Transmission respectfully requests that the Commission not allocate the 135.7-137.8 kHz band to Amateur Service on a secondary basis, subject to certain conditions. American Transmission instead respectfully requests that the Commission maintain the *status quo* with respect to such frequencies so as to ensure the continued safe, reliable, and efficient operation of American Transmission's electric transmission system, and by extension, the interconnected electric grid of the United States.

American Transmission Company LLC By its corporate manager, ATC Management Inc.

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Attorney for American Transmission

Dated: February 6, 2013